

AMENDMENTS TO THE DRAWINGS

The attached REPLACEMENT SHEET (Exhibit A) includes changes to Figs. 5A and 5C. In Fig. 5A, the lead line for reference character 404 has been extended to the via hole consistent with page 21 of the written description of the specification, lines 15 through 17. In Fig. 5C, reference character 406 has been changed to reference character 405, consistent with page 23 of the written description of the specification, lines 21 through 28.

REMARKS

Claims 1 through 22 are pending in this Application, of which claims 7 through 16 and 22 stand withdrawn from consideration pursuant to the provisions of 37 C.F.R. § 1.142(b). Accordingly, claims 1 through 6 and 17 through 21 are active.

Drawing Objection.

The Examiner objected to the drawings pursuant to 37 C.F.R. § 1.83(a), asserting that the drawings do not depict reference character 402 consistent with page 25 of the written description of the specification, line 31. Applicants disagree.

Specifically, in Fig 5A, reference character 402 denotes electrical conductive films as disclosed at page 21 of the written description of the specification, lines 8 through 22, noting particularly lines 13 and 17. This is essentially the same description with respect to reference character 402 which appears at page 25 of the written description, lines 30 through 34.

For clarity, Applicants have extended the lead line from reference character 404 in Fig. 5A to denote the via hole, consistent with the first full paragraph on page 21 of the written description.

The Examiner also asserted that reference character 406 in Fig. 5C is not defined in the specification. In response, Fig. 5C has been amended by changing reference character 406 to reference character 405, again consistent with the first full paragraph on page 23 of the written description.

Based upon the foregoing Applicants solicit withdrawal of the drawing objections.

Claims 1, 3, 4, 6, 17 and 19 through 21 were rejected under 35 U.S.C. § 102 for lack of novelty as evidenced by Zussman.

In the statement of the rejection the Examiner asserted that Zussman discloses a multilayer printed wiring board comprising a semiconductor device and interconnect member corresponding to those claimed. In support of that determination, the Examiner asserted that “The prepreg material has a dielectric loss tangent of below 10^{-4} (col 1 L 35-36)” (Second paragraph on page 4 of the September 2, 2005 Office Action.) This rejection is traversed.

The factual determination of lack of novelty under 35 U.S.C. § 102 requires the identical disclosure in a single reference of each element of a claimed invention, such that the identically claimed invention is placed into the recognized possession of one having ordinary skill in the art. *Dayco Prods., Inc. v. Total Containment, Inc.*, 329 F.3d 1358, 66 USPQ2d 1801 (Fed. Cir. 2003); *Crown Operations International Ltd. v. Solutia Inc.*, 289 F.3d 1367, 62 USPQ2d 1917 (Fed. Cir. 2002). In rejecting a claim under 35 U.S.C. § 102, the Examiner is required to specifically identify where in an applied reference identically discloses each and every feature of a claimed invention, particularly where such is not apparent. *In re Rijckaert*, 9 F.3d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993); *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984). That burden has not been discharged. Indeed, there is a significant difference between the claimed inventions and the device and interconnect disclosed by Zussman that scotches the factual determination that Zussman discloses a device or interconnect identically corresponding to those claimed.

Specifically, independent claim 1 is directed to a semiconductor device comprising, *inter alia*, an insulating resin layer having a relative dielectric constant within a range of 1.0 to 3.7 and a dielectric loss tangent within a range from 0.0001 to 0.02, while independent claim 17 is

directed to an interconnect structure comprising an insulating resin layer having a similar dielectric constant and dielectric loss tangent. No such structures are disclosed or suggested by Zussman.

The Examiner's determination that Zussman discloses an insulating resin layer having a dielectric constant and dielectric loss tangent corresponding to the insulating layer of the claimed inventions is not accurate. Specifically, Zussman does not disclose an insulating resin layer having a dielectric loss tangent within a range of 0.0001 to 0.02, as in the claimed inventions. Simple mathematics reveals that a dielectric loss tangent of **below** 10^{-4} is not **within** the claim range of "0.0001 to 0.02". This difference between the claimed inventions and Zossman is confirmed by the table appearing at the top of columns 7 and 8, wherein the exemplified dielectric loss tangents are **all outside of** the range specified in independent claims 1 and 17.

The above argued difference between the claimed inventions and the semiconductor device and interconnect of Zussman undermine the factual determination that Zussman discloses a semiconductor device and interconnect identically corresponding to those claimed. *Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics Inc.*, 976 F.2d 1559, 24 USPQ2d 1321 (Fed. Cir. 1992); *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 230 USPQ 81 (Fed. Cir. 1986). Applicants, therefore, submit that the imposed rejection of claims 1, 3, 4, 6, 17 and 19 through 21 under 35 U.S.C. § 102 for lack of novelty as evidenced by Zussman is not factually viable and, hence, solicit withdrawal thereof.

Claims 1 through 6 and 17 through 21 were rejected under 35 U.S.C. § 103 for obviousness predicated upon Zussman in view of Berger et al., Hayashi and Farquhar et al.

This rejection is traversed. Firstly, this rejection appears to be directed to dependent claims. At any rate, for the sake of completeness, Applicants submit that Zussman neither discloses nor suggests a semiconductor device or interconnect structure comprising, *inter alia*, an insulating resin layer having a dielectric loss tangent within a range of from 0.0001 to 0.02 as in the claimed inventions, for reasons previously argued in traversing the imposed rejection of claims 1 and 17 under 35 U.S.C. § 102 for lack of novelty as evidenced by Zussman. The additional references to Berger et al., Hayashi and Farquhar et al. do not cure this argued deficiency of Zussman. Accordingly, even if the applied references are combined as suggested by the Examiner, and Applicants do not agree that the requisite fact-based motivation has been established, the claimed inventions would not result. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988).

Applicants, therefore, submit that the imposed rejection of claims 1 through 6 and 17 through 21 under 35 U.S.C. § 103 for obviousness predicated upon Zussman in view of Berger et al., Hayashi and Farquhar et al. is not factually or legally viable and, hence, solicit withdrawal thereof.

Based upon the foregoing it should be apparent that the imposed objection and rejections have been overcome, and that all active claims are in condition for immediate allowance. Favorable consideration is, therefore, solicited.

Application No.: 10/725,993

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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